



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NY

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/019,295	03/22/2002	Michael John Radley Young	217994US3PCT	9250

7590 10/06/2004

CARTER, DELUCA, FARRELL & SCHMIDT LLP
445 BROAD HOLLOW ROAD
SUITE 225
MELVILLE, NY 11747

EXAMINER

JAWORSKI, FRANCIS J

ART UNIT

PAPER NUMBER

3737

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/019,295	YOUNG ET AL.	
	Examiner	Art Unit	
	Jaworski Francis J.	3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 August 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 24, 26-38 are is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 24, 26-38 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.

- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 31 and 35- 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 31, the recitation that each of the at least one generator is equally spaced from each other such one is unclear. For example only in claim 32 and claims dependent thereon is claimed the limitation to plural generators for which such a proximity relationship has meaning.

Dependent claim 35 inherits this defect.

The ambiguity transfers to claim set 36 – 38 since nowhere in the claim set is a bona fide plural transducer language adopted hence the ambiguous base claim 36 invocation of 'at least one generator ... equally spaced from an adjacent one ' extends to the dependent claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

[Parenthesized claim numbers following the rejection statement identify the specific claim or claims towards which the statement is directed.]

Claims 24, 26 –29 and 31 - 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Reichenberger (US5817021) .

Reichenberger in the face figure and figures 3 – 6 teaches an apparatus for treatment of internal tissue which comprises:

paired ultrasonic generating means 2 which each includes a transducer 8, a substantially plano-concave lens 9 immediately adjacent the transducer 8 for generating focused vibrations at focal point F in tissue, a chamber defined by sheath 40 which is adjacent the transducers and lenses and is uniformly pressurized by open fluid communication therewithin and through which the ultrasound energy passes, the generators 8 being equally spaced from each other along a substantially semi-circular (imaginary) plane by virtue of common length acoustic axes A to a common focal zone FZ, and means 41 - 52 for moving the focal point..(Claims 24, 26-29, 31-34)

(Note that positioning along a semicircle is necessarily positioning along an imaginary semi-circular plane which passes through the semi-circle. Note additionally that the rejection is applicable wherein the intended subcutaneous use is accorded no patentable weight, since the device of the patent is a transesophageal device which accesses the body interior and is therefore

specifically adapted to be capable to treat tissues of the interior such as subcutaneous tissues.]

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reichenberger in view of Fry et al (US4858613, of record with the prior Office Action). Whereas Reichenberger does not specify lens materials, it would have been obvious in view of Fry et al to use a metal lens, specifically aluminum since this provides a focusing material in a plano-concave tissue applicator configuration.

Claims 24, 26-29, 31-34 and 36 – 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedman et al (US6626854) in view of Cline et al(US5526814), further in view of Reichenberger et al or Rolt et al (US5501655).

Friedman et al in the Fig. 4 embodiment is directed to a transducer 134 forwarded by an attached plano-concave lens 136, with the direction in col. 6 lines 21 – 34 to incorporate same into a fluid coupling chamber and utilize a means for moving the chamber as shown in the Cline et al patent. Friedman et al also discusses a plural transducer embodiment in Figs. 5 and 6 which literally

is set out on a semi-circular plane (i.e. a half-cylinder) as an equivalent thereto. Friedman et al is directed to subcutaneous tissue and blood vessel since fat to be lioplyzed along with its vasculature is contained in this layer under the skin.

Friedman et al does not specifically state however that each such plural generator has an individual plano-concave lens, plural meaning the examiner is ascribing to all of the base claim recitations for purposes of this rejection irrespective of the ambiguity noted above.

It would have been obvious however in view of Reichenberger (focus F,FZ) as discussed above or Rolt et al (transducers 14, 16 and plano-concave lenses 15, 17 and focus 24 or F) to provide independent plano-concave lenses to plural transducers arranged along a semi-circular plane since this allows targeting of the focal point with flexibility of approach.

Claims 30 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedman et al in view of Cline et al, further in view of Reichenberger or Rolt et al as applied to claims 24 and 31 above, and further in view of Fry et al, which teaches the suitability of aluminum as a plano-concave ultrasound treatment lens material in the absence of specific teachings of lens materials in the former.

Any inquiry concerning this communication should be directed to Jaworski Francis J. at telephone number 703-308-3061.

FJJ:fjj

9-29-2004



Francis J. Jaworski
Primary Examiner